

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (Canceled)

4. (Currently Amended) A disc drive apparatus for writing/reading information into and/or from a disc, comprising:

- a controllable motor for rotating a disc;
- a control unit having a first output for generating a control signal for said motor; and

temperature measuring means for generating a measuring signal indicating a temperature occurring within the disc drive apparatus, the temperature measuring means being configured to measure the temperature of a disc drive component;

wherein the control unit is configured to operate in a fan mode in which said motor ~~is rotated~~ rotates the disc without any

writing and/or reading being executed by the disc drive apparatus;

wherein the control unit has a signal input coupled to said temperature measuring means, and is further configured to enter said fan mode in response to the measuring signal received from said temperature measuring means; and

wherein said control unit is further configured to monitor said measuring signal during a write/read operation, to set a first flag in response to receiving the measuring signal indicating a temperature above a first threshold temperature, and to enter said fan mode if, at completion of the write/read operation, said first flag is set.

5. (Previously Presented) The disc drive apparatus according to claim 4, wherein said control unit is further configured to reset said first flag in response to receiving the measuring signal indicating a temperature below said first threshold temperature.

Claims 6-8 (Canceled)

9. (Currently Amended) A disc drive apparatus for

writing/reading information into and/or from a disc, comprising:

a controllable motor for rotating a disc;

a control unit having a first output for generating a control signal for said motor; and

temperature measuring means for generating a measuring signal indicating a temperature occurring within the disc drive apparatus, the temperature measuring means being configured to measure the temperature of a disc drive component;

wherein the control unit is configured to operate in a fan mode in which said motor ~~is rotated~~ rotates the disc without any writing and/or reading being executed by the disc drive apparatus;

wherein the control unit has a signal input coupled to said temperature measuring means, and is further configured to enter said fan mode in response to the measuring signal received from said temperature measuring means; and

wherein said control unit is further configured to monitor said measuring signal during a write/read operation, to set a timer in response to receiving the measuring signal indicating a temperature above a second threshold temperature higher than a first threshold temperature, and to enter said fan mode if, after a

predetermined time determined by said timer, said measuring signal indicates the temperature is above said second threshold temperature.

Claims 10-11 (Canceled)

12. (Currently Amended) A disc drive apparatus for writing/reading information into and/or from a disc, comprising:
a controllable motor for rotating a disc; and
a control unit having a first output for generating a control signal for said motor;

wherein the control unit is configured to operate in a fan mode in which said motor ~~is rotated~~ rotates the disc without any writing and/or reading being executed by the disc drive apparatus;

wherein the control unit is further configured to operate the disc drive apparatus in a duty cycle mode in which the control unit is alternately operative in a normal mode portion during which the writing/reading is performed, and in an energy saving mode portion during which the writing/reading is temporarily suspended while rotation of said motor is continued; and

wherein the duty cycle mode has a cycle duration selected in a range of 1-10 sec.

13. (Previously Presented) The disc drive apparatus according to claim 12, wherein the duty cycle mode has a duty cycle of about 50%.

Claim 14 (Canceled)

15. (Currently Amended) A disc drive apparatus for writing/reading information into and/or from a disc, comprising:

- a controllable motor for rotating a disc; and
- a control unit having a first output for generating a control signal for said motor; and

temperature measuring means for generating a measuring signal indicating a temperature occurring within the disc drive apparatus, the temperature measuring means being configured to measure the temperature of a disc drive component;

wherein the control unit is configured to operate in a fan mode in which said motor ~~is rotated~~ rotates the disc without any

writing and/or reading being executed by the disc drive apparatus;

wherein the control unit is further configured to operate the disc drive apparatus in a duty cycle mode in which the control unit is alternately operative in a normal mode portion during which the writing/reading is performed, and in an energy saving mode portion during which the writing/reading is temporarily suspended while rotation ~~of~~ by said motor is continued; and

wherein said control unit has a signal input coupled to said temperature measuring means, and is further configured to monitor said measuring signal during a write/read operation, to set a timer in response to receiving the measuring signal indicating a temperature above a second threshold temperature, and to enter said duty cycle mode if, after a predetermined time determined by said timer, said measuring signal still indicates the temperature is above a second threshold temperature higher than a first threshold temperature.

Claim 16 (Canceled)

17. (Currently Amended) A disc drive apparatus for

writing/reading information into and/or from a disc, comprising:

a controllable motor for rotating a disc; and

a control unit having a first output for generating a control signal for said motor;

wherein the control unit is configured to switch modes of operation to a fan mode in which said motor ~~is rotated~~ rotates the disc without any writing and/or reading being executed by the disc drive apparatus;

wherein the control unit is further configured to switch the modes of operation to a first safety mode during which the writing/reading is performed at a first predetermined safety speed; and

wherein said control unit is further configured to make a transition to said first safety mode in response to receiving the measuring signal indicating a temperature above a threshold temperature, and to make a transition from said first safety mode to a duty cycle mode if, after a predetermined time determined by said timer, said measuring signal still indicates the temperature is above said threshold temperature.

Claims 18-22 (Canceled)

23. (Currently Amended) A disc drive apparatus for writing/reading information into and/or from a disc, comprising:
a controllable motor for rotating a disc; and
a control unit having a first output for generating a control signal for said motor;

wherein the control unit is configured to switch modes of operation to a fan mode in which said motor is rotated without any writing and/or reading being executed by the disc drive apparatus;

wherein the control unit is further configured to switch modes
a turntable mode in which said motor ~~is rotated~~ rotates a turntable
without a disc being present; and

wherein said control unit is configured to start a timer on transition to said turntable mode, and to exit said turntable mode after a predetermined time determined by said timer.